in a sealed covering and designed to be fired outside the confines of a borehole.

Short-delay electric detonator. An electric detonator with a designated delay period of 25 to 1,000 milliseconds.

§75.1301 Qualified person.

- (a) A qualified person under this subpart is a person who—
- (1) Is certified or qualified to use explosives by the State in which the mine is located provided that the State requires a demonstration of ability to safely use permissible explosives as prescribed by this subpart effective January 17, 1989; or
- (2) In States that do not certify or qualify persons to use explosives required by this section, has at least 1 year of experience working in an underground coal mine that includes direct involvement with procedures for handling, loading, and preparing explosives for blasting and demonstrates to an authorized representative of the Secretary the ability to use permissible explosives safely.
- (b) Persons qualified or certified by a State to use permissible explosives in underground coal mines as of May 17, 1989, are considered qualified under this section even though their State program did not contain a demonstration of ability requirement.
- [35 FR 17890, Nov. 20, 1970, as amended at 56 FR 51616, Oct. 11, 1991; 60 FR 33723, June 29, 1995]

§ 75.1310 Explosives and blasting equipment.

- (a) Only permissible explosives, approved sheathed explosive units, and permissible blasting units shall be taken or used underground.
- (b) Black blasting powder, aluminum-cased detonators, aluminum-alloy-cased detonators, detonators with aluminum leg wires, and safety fuses shall not be taken or used underground.
- (c) Explosives shall be fired only with a permissible blasting unit used in a manner consistent with its approval. Blasting units approved by MSHA that have approval labels specifying use with short-delay detonators with delay periods between 25–500 milliseconds are accepted to fire short-delay detonators up to 1,000 milliseconds, instantaneous

detonators and long period delay detonators for anthracite mines.

- (d) Permissible explosives and sheathed explosive units shall not be used underground when they are below the minimum product firing temperature specified by the approval. Explosives previously approved which do not specify a minimum firing temperature are permissible for use so long as the present approval is maintained.
- (e) Electric detonators shall be compatible with the blasting unit and have sufficient strength to initiate the explosives being used.

§ 75.1311 Transporting explosives and detonators.

- (a) When explosives and detonators are to be transported underground—
- (1) They shall be enclosed in separate, substantially constructed containers made of nonconductive material, with no metal or other conductive materials exposed inside, except as specified in paragraph (d) of this section; and
- (2) Each container of explosives and of detonators shall be indelibly marked with a readily visible warning identifying the contents.
- (b) When explosives and detonators are transported by any cars or vehicles—
- (1) The cars or vehicles shall be marked with warnings to identify the contents as explosive. The warnings shall be readily visible to miners approaching from any direction and in indelible letters:
- (2) Explosives and detonators shall be transported either in separate cars or vehicles, or if in the same cars or vehicles as follows:
- (i) Class A and Class C detonators in quantities greater than 1,000 shall be kept in the original containers as shipped from the manufacturer and separated from explosives by a hardwood partition at least 4 inches thick, a laminated partition or equivalent; and
- (ii) Class A and Class C detonators in quantities of no more than 1,000 shall be separated from explosives by a hardwood partition at least 4 inches thick, a laminated partition or equivalent.
- (3) No persons, other than those necessary to operate the equipment or to

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accompany the explosives and detonators, shall be transported with explosives and detonators, and

- (4) When explosives and detonators are transported using trolley locomotives—
- (i) Trips carrying explosives and detonators shall be separated from all other mantrips by at least a 5-minute interval; and
- (ii) Cars containing explosives or detonators shall be separated from the locomotives by at least one car that is empty or that contains noncombustible materials.
- (c) When explosives and detonators are transported on conveyor belts—
- (1) Containers of explosives shall be separated from containers of detonators by at least 50 feet;
- (2) At least 6 inches of clearance shall be maintained between the top of any container of explosives or container of detonators and the mine roof or other obstruction;
- (3) Except when persons are riding the belt to accompany explosives or detonators, a person shall be at each transfer point between belts and at the unloading location; and
- (4) Conveyor belts shall be stopped before explosives or detonators are loaded or unloaded.
- (d) When explosives and detonators are transported by hand they shall be carried in separate, nonconductive, closed containers.

§ 75.1312 Explosives and detonators in underground magazines.

- (a) The quantity of explosives kept underground shall not be more than is needed for 48 hours of use.
- (b) Except as provided in §75.1313, explosives and detonators taken underground shall be kept in—
- (1) Separate, closed magazines at least 5 feet apart: or
 - (2) The same closed magazine when-
- (i) Separated by a hardwood partition at least 4 inches thick; or
- (ii) Separated by a laminated partition; or
- (iii) Separated by a device that is equivalent.
- (c) Only explosives and detonators shall be kept in underground magazines.

- (d) Magazines shall be substantially constructed and all interior surfaces shall be made of nonconductive material, with no metal or other conductive material exposed inside.
 - (e) All magazines shall be—
- (1) Located at least 25 feet from roadways and any source of electric current:
- (2) Located out of the direct line of the forces from blasting; and
- (3) Kept as dry as practicable.
- (f) Magazine locations shall be posted with indelibly marked and readily visible warnings indicating the presence of explosives.
- (g) Only materials and equipment to be used in blasting shall be stored at magazine locations.

§ 75.1313 Explosives and detonators outside of magazines.

- (a) The quantity of explosives outside a magazine for use in a working section or other area where blasting is to be performed shall—
 - (1) Not exceed 100 pounds; or
- (2) Not exceed the amount necessary to blast one round when more than 100 pounds of explosives is required.
- (b) Explosives and detonators outside a magazine that are not being transported or prepared for loading boreholes shall be kept in closed separate containers made of nonconductive material with no metal or other conductive material exposed inside and the containers shall be—
- (1) At least 15 feet from any source of electric current:
- (2) Out of the direct line of the forces from blasting;
- (3) In a location to prevent damage by mobile equipment; and
 - (4) Kept as dry as practicable.
- (c) Explosives and detonators not used during the shift shall be returned to a magazine by the end of the shift.

§75.1314 Sheathed explosive units.

- (a) A separate instantaneous detonator shall be used to fire each sheathed explosive unit.
- (b) Sheathed explosive units shall be primed and placed in position for firing only by a qualified person or a person working in the presence of and under the direction of a qualified person. To prime a sheathed explosive unit, the